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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,552	03/08/2002	Hiroshi Sato	N0029.0002/P002	8759

7590

10/19/2004

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EXAMINER
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BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/092,552	SATO, HIROSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shay L Balsis	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group II, claims 7-16 in the reply filed on 8/2/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the groove on the surface as described in the claim 15 and in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "said tip" in line 3. There is insufficient antecedent basis for this limitation in the claim. Examiner is not sure what "tip" the applicant is referring to. Does the applicant mean the cleaning mechanism tip or the cleaning stick tip?

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

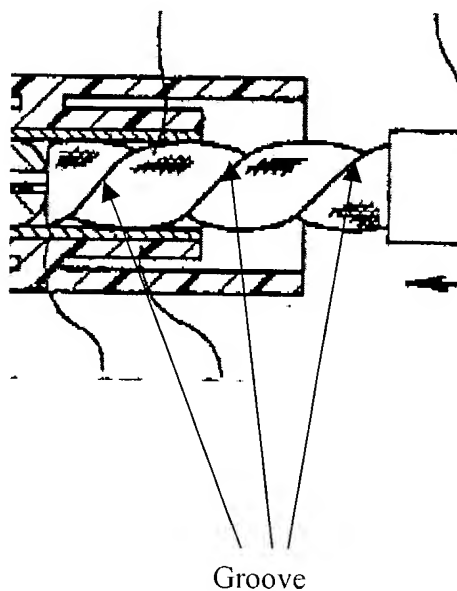
The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 7, 10-12 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato (USPN 6449795).

Sato teaches a cleaning mechanism that brings a tip of a cleaning stick in contact with an end face of an optical connector. There is an attachment (63) into which a tip of the cleaning mechanism (2) containing the cleaning stick (3) and optical connector (60) are fitted coaxially from opposing directions (fig. 5). The cleaning stick is rotated along a center axis (shown by the arrow in fig. 5) and can begin rotation before being pressed against the optical connector's end face. The user controls the rotation and therefore the rotation can begin whenever the user feels necessary. The cleaning stick is then pressed against the optical connector's end face at a constant force. The cleaning stick is made from a material that is softer than the optical connector's end face. The cleaning stick is also in the shape of a helix and has a groove along the surface along its axis (see figure below). The direction of rotation is determined so as to produce a current of air flowing away from the tip along the helix.



Claims 7 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimoji et al. (USPN 6047716).

Shimoji teaches a cleaning mechanism that brings a tip of a cleaning stick in contact with an end face of an optical connector. There is an attachment (32) into which a tip of the cleaning mechanism (11) containing the cleaning stick (12) and optical connector (31) are fitted coaxially from opposing directions (fig. 4). The cleaning stick is rotated along a center axis (13, as shown by arrows on fig. 4) and can begin rotation before being pressed against the optical connector's end face. The user controls the rotation and therefore the rotation can begin whenever the user feels necessary. The cleaning stick is then pressed against the optical connector's end face at a constant force. The cleaning stick is made from a material that is softer than the optical connector's end face.

Claims 7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Stein et al. (USPN 5325452).

Stein teaches a cleaning mechanism that brings a tip of a cleaning stick in contact with an end face of an optical connector. There is an attachment (160, 164) into which a tip of the cleaning mechanism (120) containing the cleaning stick (136) and optical connector (116) are fitted coaxially from opposing directions (fig. 1). The cleaning stick is eccentrically rotated along a center axis (as shown by arrows on fig. 1) and can begin rotation before being pressed against the optical connector's end face. The user controls the rotation and therefore the rotation can begin whenever the user feels necessary. The cleaning stick is then pressed against the optical connector's end face at a constant force. The cleaning stick is made from a material that is softer than the optical connector's end face.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoji et al. or Stein et al..

Shimoji or Stein teach all the essential elements of the claimed invention however fail to teach that the cleaning stick is rectangular in shape. While the references do not discuss a particular shape for the cleaning stick, such appears to relate more to the materials used for the cleaning stick, the particular shape of cleaning stick holder, etc than on any inventive concept. Further, one of skill in the art would by routine experimentation find the optimum shape for the cleaning stick. It would have been obvious to one of skill in the art to make the cleaning stick of Shimoji or Stein any shape so desired or required, including as claimed to optimize performance of the cleaning.

***Allowable Subject Matter***

Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 8 states that the tip of the cleaning mechanism is fitted into the attachment at a predetermined depth. The cleaning stick is exposed from the cleaning mechanism by pressing

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the tip of the cleaning mechanism toward the optical connector. The prior art fails to teach this limitation and both the cleaning mechanism and cleaning sticks of the prior art are stationary; therefore there is no motivation to make the cleaning stick or the cleaning mechanism moveable with relation to the other.

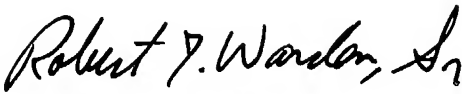
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb  
10/6/04

  
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